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CLAIMS (92) 13 JUL 2006

1. Submarine actuator for the actuation of a submarine device comprising a container body from which a drive shaft projects that is suitable for inserting in a seat  
5 of said submarine device and suitable, through its rotation, for actuating said submarine device, ~~characterised in that~~ said shaft is moved by at least one electric motor arranged inside said container body and actuated by an electric control signal generated by  
10 a remote control station,  
characterised in that  
said container body comprises a box-shaped element,  
inside which at least one electric motor and said drive  
shaft are arranged, and a substantially cylindrical  
15 element inside which there is an electronic control  
board for said at least one motor.

2. Actuator according to claim 1, comprising two electric motors suitable for moving said drive shaft independently from each other.

20 ~~3. Actuator according to claim 1, said container body comprises a box shaped element, inside which at least one electric motor and said drive shaft are arranged and a cylindrical element inside which there is an electronic control board for said at least one motor.~~

3. Actuator according to claim 1, wherein the substantially cylindrical element is a hermetic container into which a pressurised gas, for example nitrogen, is inserted.

5 4. Actuator according to claim 2, wherein said motors are coupled with the drive shaft through a gear mechanism, which comprises a transmission shaft, connected through a pair of gears to the rotation shafts of the two electric motors, on such a  
10 transmission shaft a worm screw being foreseen, integral with the rotation of said shaft, which engages with a further sprocket made on the extension of said drive shaft inside said container body.

5. Actuator according to claim 1 3, comprising a device  
15 for the compensation of the external pressure comprising a membrane accumulator, firmly connected on a side of said box-shaped element that injects pressurised oil inside it through an inlet pipeline, in order to equalise the internal pressure and the  
20 external pressure.

6. Actuator according to claim 1 3, wherein said drive shaft completely crosses the box-shaped element and, on its upper end, a visual recognition device of the  
position taken up by the submarine device controlled by

the movement of the drive shaft is made.

7. Actuator according to claim 6, wherein on such an upper end of the drive shaft a seat is formed for the insertion of a possible robotised arm suitable for rotating the drive shaft in an emergency situation in which it is not possible to actuate the drive shaft electrically.

8. Actuator according to claim 1, wherein the power supply of said at least one electric motor can be carried out through a suitable power supply cable transported by the remote control station to the submarine actuator.

9. Actuator according to claim 1, wherein the electrical power supply of said at least one electric motor can be directly obtained from electrical power supply lines associated with the controlled submarine device.

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